

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended) A marine seismic survey system comprising:
a marine cable, the marine cable comprising a plurality of piezo-ceramic pressure sensors and one or more ~~electrochemical~~ electromechanical transducers, wherein said plurality of pressure sensors is arranged in groups of at least two pressure sensors and said group of a least two pressure sensors is configured to produce a group output being representative of a vertical pressure gradient at the group location, and wherein said one or more electromechanical transducers are configured to generate signals indicative of an angle of rotation of said at least two pressure sensors and means for correcting the vertical pressure gradient for the effect of rotation angle.

(Original) The seismic survey system of claim 1 wherein the group comprises at least three hydrophones.

3. (Original) The seismic survey system of claim 1 wherein the at least two pressure sensors of a group are located in a plane perpendicular to the main or longitudinal axis of the cable.

4. (Original) The seismic survey system of claim 1 wherein the at least pressure sensors of a group are located in a plane perpendicular to the main or longitudinal axis of the cable and wherein an output of said group is combined with an output of a further hydrophone located outside said plane.

5. (Original) The seismic survey system of claim 1 wherein the group comprises four hydrophones in a tetrahedral configuration.

6. (Original) The seismic survey system of claim 1 wherein the at least two pressure sensors contributing to the group output being representative of the vertical pressure gradient are located within a section the cable of less than 10 cm length as measured in the main or longitudinal direction of said cable.

7. (Original) The seismic survey system of claim 1 wherein each pressure sensor of a group is arranged at essentially equal distance from the other sensors of the group.

8. (Original) The seismic survey system of claim 1 wherein the pressure sensors of a group are connected to provide an output representative of a linear combination of individual sensor signals prior to digitization.

9. (Original) The seismic survey system of claim 1 wherein the one or more electromechanical transducers are a plurality of inclinometers distributed along the length of the cable.

10. (Original) The seismic survey system of claim 1 wherein the one or more electromechanical transducers are one or more acoustic or sonic sources.

11. (Previously amended) The seismic survey system of claim 10 wherein the one or more electromechanical transducers comprise one or more acoustic sources located within cables towed in parallel with the cable carrying the groups of at least two hydrophones.

12. (Original) The seismic survey system of claim 1 wherein the one or more electromechanical transducers are adapted to operate independently of the hydrostatic pressure.

13. (Original) A marine seismic cable with a plurality of piezo-ceramic pressure sensors, wherein said plurality of pressure sensors is arranged in groups of at least two pressure sensors with a group output being representative of the vertical pressure gradient at the group location, for use in system according to claim 1.

14. (Currently amended) A method of acquiring an acoustic wavefield having in-line, cross-line and vertical components using a marine seismic survey system comprising:

using a plurality of piezo-ceramic pressure sensors disposed in a marine cable to measure the vertical component of the acoustic wavefield;

generating an output being representative of the vertical pressure gradient;

one or more electromechanical transducers to generate signals indicative of a rotation angles of said plurality of pressure sensors; and

using said signals indicative of said rotation angles of said plurality of pressure sensors to correct said vertical ~~component~~ pressure gradient for the effects of the rotation angles.

15. (Canceled)